

APPARATUS AND METHOD FOR TRACE STREAM  
IDENTIFICATION OF A PIPELINE FLATTENER  
PRIMARY CODE FLUSH FOLLOWING INITIATION  
OF AN INTERRUPT SERVICE ROUTINE

**Abstract of the Invention**

1 When a PROGRAM CODE FLUSH signal is generated in a target  
2 processor during a test procedure, a sync marker is  
3 generated in a program counter trace stream. The sync  
4 marker includes a plurality of packets, the packets  
5 identifying that the sync marker is has been generated as a  
6 result of the PROGRAM CODE FLUSH signal. The program code  
7 flush sync marker identifies the absolute program counter  
8 address at the time of the generation of the PROGRAM CODE  
9 FLUSH signal and relates the PROGRAM CODE FLUSH signal sync  
10 marker to a timing trace stream. The PROGRAM CODE FLUSH  
11 signal is generated at the transition between the program  
12 (primary) code instructions being removed from the pipeline  
13 flattener and the interrupt service routine (secondary)  
14 code instructions being removed from the pipeline  
15 flattener.